

REMARKS

Claims 1-29 are pending in the present application. In the Office Action, claims 1-10 and 13-28 were rejected under 35 U.S.C. § 102(e) as allegedly being obvious over Streter (U.S. Patent No. 6,456,858) in view of the subject matter described in the background section of the present application. Claims 11, 12, and 29 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Steter and the background section in view of Corriveau, et al (U.S. Patent No. 5,918,177). The Examiner's rejections are respectfully traversed.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Furthermore, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. That is, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). A recent Federal Circuit case emphasizes that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

Independent claims 1 and 18 set forth an apparatus and a method, respectively, for wirelessly paging a mobile device using a network operating according to multiple wireless

technologies based at least in part on a technological capability of the mobile device. Claims 1 and 18 also set forth, among other things, determining whether the wireless technology of the mobile unit corresponds to at least one of the multiple wireless technologies of the network based on the accessed information and generating a paging request that is used to determine a geographic area that includes the mobile device. The paging request is generated based at least partially on the technological capability of the mobile device when the wireless technology of the mobile unit corresponds to at least one of the multiple wireless technologies of the network.

As defined in the specification, wireless technologies are the technologies used to support wireless communications between mobile devices and networks. Wireless technologies include personal communications services (PCS) and cellular telecommunication systems. See, *e.g.*, Patent Application, page 2, ll. 25-31. Thus, one example of a network operating according to multiple wireless technologies could be a network operating according to personal communications services (PCS) technology and cellular telecommunication technology. As also defined in the specification in accordance with common usage in the art, paging requests are messages that are broadcast via multiple base stations to determine the cell that currently includes a particular mobile unit. For example, in order to find a mobile device, a mobile switching center (MSC) sends out a paging request to sets of cells that are in communication with the MSC (and possibly to cells of adjacent MSCs). See Patent Application, page, 2, ll. 11-13.

Streter describes a dual-mode wireless telephone communication system 10 that may be used for wireless communication with dual-mode wireless telephones 12. The dual-mode wireless telecommunications system 10 includes a first wireless telephone system that outputs analog telephone signals for transmission according to a first wireless protocol and a digital

wireless system 20 that includes a digital base station 22 for transmission according to a digital-only transmission protocol. See Streter, col. 5, ll. 15-39 and Figure 1. If a mobile telephone switching office 18 detects a prescribed traffic condition based on a blockage factor exceeding a threshold, a control processor 52 may select at least one dual-mode mobile unit 12 for rescan. The control processor 52 then instructs the base stations that are in communication with each selected dual-mode telephone 12 to transmit a rescan control command. The base stations 22 receive the control command from the control processor 52 and transmit the rescan control command to the selected mobile units. See Steter, col 11, line 58- col. 12, line 13.

However, as admitted by the Examiner, Steter does not teach or suggest providing a paging message that is used to locate the cell that currently includes a selected mobile unit, as set forth in independent claims 1 and 18. The Examiner notes that the background section of the present application describes providing paging messages to locate mobile devices. However, the background section of the present application teaches that paging messages are broadcast according to a particular paging technology. Thus, the background section of the present application is completely silent with regard to paging requests that are generated based at least partially on the technological capability of the mobile device.

With regard to the Examiner's rejection of claims 11-12 and 29, Corriveau describes a mobile switching center (MSC) for wirelessly paging a mobile device based on the mobile device's expected service type. For example, some mobile devices may only be capable of receiving voice services, and not asynchronous data services and/or facsimile services. Thus, Corriveau describes modifying pages from the mobile switching centers to include service codes that indicate the service type (*e.g.* voice service, asynchronous data service, facsimile service) for the call. However, Corriveau fails to describe or suggest paging a mobile device using a network

operating according to multiple wireless technologies. Furthermore, as previously admitted by the Examiner on page 3 of the Final Office Action dated May 24, 2005, Corriveau fails to describe or suggest generating a paging request for the mobile device that is based at least partially on the technological capability of the mobile device when the wireless technology of the mobile unit corresponds to at least one of the multiple wireless technologies of the network.

For at least the aforementioned reasons, Applicants respectfully submit that the prior art of record fails to teach or suggest all the limitations of the claimed invention. In particular, the prior art of record fails to teach or suggest paging a mobile device using a network operating according to multiple wireless technologies by generating paging requests that are used to locate the cell that currently includes a selected mobile unit and that are generated based at least partially on the technological capability of the mobile device, as set forth in independent claims 1 and 18.

Applicants further submit that the cited references fail to provide any suggestion or motivation to modify the prior art in the manner suggested by the Examiner to arrive at the claimed invention. The Examiner has suggested that it would be obvious to combine the conventional paging techniques described in the background section of the present application and the techniques described in Streter. Applicants respectfully disagree. The control messages described by Steter are provided to base stations that are in communication with the selected dual-mode telephones 12. The techniques described in Streter therefore assume that the selected dual-mode telephones 12 have already been located and the cells that include the dual-mode telephones 12 are already known. For example, the control messages described in Streter may be broadcast to dual-mode telephones 12 that initiate a telephone call using a preferred CDMA system when it is not favorable to use the CDMA system. See Streter, col. 5, ll. 62-65.

Consequently, there is no need to provide any paging messages because there is no need to locate the cells including the selected dual-mode telephones 12. Applicants therefore submit that neither Streter nor the background section of the present application provides any suggestion or motivation to implement paging messages in the system described by Streter.

To the contrary, Applicants respectfully submit that the cited references teach away from the Examiner's proposed combination and modification of the prior art of record. Modifying the techniques described by Streter to include transmitting a paging message to dual-mode telephones 12 that have already been located would unnecessarily increase overhead on the paging channel because there is no need to transmit a paging message when communication with the dual-mode telephone 12 has already been initiated and/or established. The background section of the present application indicates that paging messages should be provided in a manner that reduces paging overhead. See Patent Application, page 2, ll. 11-15. Thus, the prior art of record teaches away from the Examiner's proposed modification of the prior art, which would increase paging overhead. It is by now well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious. *See, inter alia, In re Fine*, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988); *In re Nielson*, 2 U.S.P.Q.2d (BNA) 1525, 1528 (Fed. Cir. 1987); *In re Hedges*, 228 U.S.P.Q. (BNA) 685, 687 (Fed. Cir. 1986).

For at least the aforementioned reasons, Applicant respectfully submits that the Examiner has failed to make a *prima facie* case that the present invention is obvious over Streter and the background section in view of Corriveau. Applicant requests that the Examiner's rejections of claims 1-29 under 35 U.S.C. 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the

undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Date: February 14, 2007

/Mark W. Sincell/

Mark W. Sincell, Ph.D.

Reg. No. 52,226

Williams Morgan & Amerson, P.C.

10333 Richmond Avenue, Suite 1100

Houston, TX 77042

(713) 934-7000

(713) 934-7011 (Fax)

AGENT FOR APPLICANT